## WHAT IS CLAIMED IS:

- A method of manufacturing a magneto-resistance effect type head, the magneto-resistance effect type head that includes an element portion of magneto-resistance effect type and reproduces a read signal of data from a recording medium by the element portion, comprising:

   applying a predetermined DC current to the element portion; and performing heat treatment on a part of the element portion that has been thermally deformed due to application of the DC current.
- 10 2. The method according to claim 1, wherein the performing includes causing a surface of a bump disk to collide with the part of the element portion.
- 3. The method according to claim 2, wherein the bump disk is a15 laser bump disk.
  - 4. The method according to claim 3, wherein the laser bump disk and the element portion are made to collide for five minutes.
- 20 5. The method according to claim 2, wherein a plurality of bumps each having a ring-shaped protrusion and a recess is spirally formed on the bump disk.

6. The method according to claim 1, further comprising: forming the magneto-resistance effect type head with a write element and a read element; and applying a weak current to the read element.

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